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ABSTRACT

Instructional models are distinct sets of sequenced teaching actions created to promote student achievement of selected learning outcomes. They identify: (1) the type of information to be presented to students; (2) the sequence in which it should be presented; (3) the teaching tactics that stimulate necessary cognitive learning processes; and (4) the tasks students must perform successfully to apply what they have learned. The study of instructional models helps preservice teachers develop a cognitive framework for making teaching decisions. An instructional models approach rests upon two basic assumptions: (1) the classroom situations, content goals, and students differ so widely that no single teaching method will ever be universally effective; and (2) a wide range of instructional options exist, and teachers can adopt and adapt these models to their unique situations. The two families of models most appropriate to social studies teachers are the information processing models and the social interaction models. A models approach in a methods course is a powerful means to help preservice teachers become effective social studies teachers. It provides a cognitive framework for understanding instruction and a basis for responding appropriately to different curriculum goals. A models approach ensures that preservice teachers have the knowledge and technical skills needed to make a significant contribution to the education of citizens. (SM)

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INSTRUCTIONAL MODELS IN METHODS COURSES

Occasional Paper No. 7

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INSTRUCTIONAL MODELS IN METHODS COURSES

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College professors* who teach a secondary social studies methods course face a challenging, if not impossible, responsibility. Within the very limited amount of time afforded by a methods course, professors must prepare pupils who have studied one or more social science disciplines to become effective social studies teachers. That mission is not accomplished easily. Repeated observations indicate that the quality of teaching in social studies is generally quite poor (Shaver, et al., 1979; Melinger, 1981; Armento, 1986). An approach based on instructional models can enhance the power of a methods course and contribute much to the preparation of effective social studies teachers.

An instructional model differs from what is generally referred to as a teaching method. "Models are prescriptive teaching strategies designed to accomplish particular (content) goals" (Eggen, et al., 1979). While models are linked to distinct but limited learning outcomes, methods are not. For example, lecture, defined as a relatively long period of teacher talk, is a method. Lecture refers only to a mode of presenting content. Ausubel's Advance Organizer, however, is an instructional model because it is designed to achieve a specific purpose (comprehension of organized bodies of abstract knowledge), describes the order in which different types of information should be presented to students (from most to least inclusive levels of abstraction), and identifies specific teaching tactics to activate internal learning processes (promote progressive differentiation and facilitate integrative reconcilation). Another difference between methods and models is that the former are general, while the latter are precise. For example, inquiry refers to a general method. A few of the many models subsumed by that general category are the Jurisprudential model (Oliver and Shaver, 1971), the Inquiry Training model (Suchman, 1962), and the Group Investigation model (Thelan, 1960). Precise details about teaching actions and specifity of purpose distinguish models from methods.

*The words professor, pupil, student and teacher refer respectively to the following statuses: a. the college instructor of a methods course, b. pre-service teacher candidates, c. students in a middle or high school class, and d. teachers of secondary social studies.

The study of instructional models helps pupils to develop a cognitive framework for making teaching decisions. Models establish "an organizational context and taxonomy for looking at different kinds of teaching, providing alternatives for teacher educators, as well as teachers, and also providing a base for studying teaching patterns that heretofore have been somewhat elusive. Additionally, models of teaching can be used to shape curriculum ..., to aid in designing instructional materials and to guide instruction in the classroom" (Kilgore, 1984). The concept of Models of Teaching (Joyce and Weil, 1980) provides some degree of order to the otherwise disarrayed hodgepodge of methods, strategies, tactics, and beliefs in the literature about teaching social studies.

A models approach rests upon two basic assumptions. First, classroom situations, content goals, and students differ so widely that no single teaching method will ever be universally effective. Second, a wide range of instructional options exist, and teachers can adopt and adapt these models to their unique situations. An emphasis on instructional models responds to the immediate desire of pupils to learn "practical" teaching tactics. Yet the approach permits professors to integrate other important content (e.g. rational; curriculum; citizenship; economic, global, and law related education; as well as other topics) into the course, but to develop these ideas in relation to the immediate learning interests of their pupils.

Instructional Models

A model is a distinct set of ordered teaching actions created to promote student achievement of certain learning outcomes. For example, figure one depicts two instructional models designed to teach concepts. They identify (1) the type of information to be presented to students, (2) the sequence in which it should be presented, (3) the teaching tactics that stimulate necessary cognitive learning processes, and (4) the tasks students must perform successfully to apply what they have learned. "Instructional models are organized sets of prescriptions (for teacher actions) based both on an analysis of the structure of knowledge and on an understanding of cognitive processes and learning theories" (Reigeluth, 1983).

Models are prescriptive. They contain a set of probabilistic principles that assert "means-ends" relationships between certain teacher actions and student learning. Models identify variables that a teacher can control and that contribute to successful student achievement. Because the effects of instruction are mediated by the cognitive processes of students, there are no teaching behaviors that are uniformly followed by specific levels of student achievement. Therefore, the principles in a model

Figure 1. Examples of Two Instructional Models

CONTENT GOAL: CONCEPTS

A concept is the content conveyed by a definition that gives the meaning of a general word, term, or phrase.

A concept is an abstract category that classifies a number of different objects, events or situations into the same group because they all share one or more common characteristics.

A concept is an idea composed of a mental category, a set of criteria for deciding what to include or to exclude from the category, and, usually, a label to name the category.

TWO INSTRUCTIONAL MODELS FOR TEACHING CONCEPTS

DEDUCTIVE	INDUCTIVE
DEFINITION (Abstract Idea) ↓ EXAMPLES (Concrete Illustrations)	EXAMPLES (Concrete Illustrations) ↓ DEFINITION (Abstract Idea)

INSTRUCTIONAL PROCEDURES

CONTENT PRESENTATION	CONTENT PRESENTATION
Present Abstraction. (Define the concept.)	Present Examples (and Non-examples). State concept's name and associate with examples.
Clarify Abstraction. (Elicit paraphrased definition, present or elicit definition of terms, and emphasize concept's critical features.)	Identify Concept's Critical Features. (Direct students to identify features common to all examples, or Identify features shared by examples and verbalize differences observed between examples and non-examples. List and organize critical features on board or transparency. Cue students, if necessary, by asking questions that direct attention to any overlooked critical feature.)
Relate Concept to Prior Learning. (Link to superordinate and contrast with coordinate concepts.)	Elicit Abstraction. (Request definition of concept and clarify terms.)
Present Examples (and Non-examples). (Provide examples that depict concept's critical features and explicity direct attention to how the common features are evident in those illustrations. Provide non-examples that lack one or more of the concept's critical features and describe how they differ from examples. Present a strategy for distinguishing between examples and non-examples.)	Relate Concept to Prior Learning. (Link to superordinate and contrast with coordinate concepts.)

PRACTICE: APPLICATION OF ABSTRACT IDEA

Present additional examples and require students to identify how the critical features are portrayed (or)

Present a set of examples and non-examples, and require students to distinguish between them, (and/or)

Require students to generate and justify their own examples.

Encourage student verbalization of concept's name, definition and critical features as appropriate.

are probablistic and not deterministic propositions. Yet, as B. O. Smith (1980) notes, "professional practice requires only probable, not exact, knowledge in order to be successful. That knowledge is probable and that there is often more than one means to an end are reasons why judgment is important to successful practice in any profession."

Instructional models should be presented to and learned by pupils as heuristic guidelines for professional judgment and action. Too often pupils enter a methods course expecting (or desiring) to learn procedural routines that will make them effective social studies teachers. Models can not be effectively implemented merely by following algorithmic rules that always produce the desired results. They do not work that way. Further, a real danger exists if pupils mis-conceive the nature of a models approach to teaching. Fenstermacher (1980) warns that "perhaps the most debilitating aspect of bridging (between research and practice with algorithmic) rules is its effect on the practitioner's perception of his or her stature and competence. Persons expected to change their behavior on the basis of rules imposed by others are denied a portion of their freedom to think and act independently."

When properly understood, models help pupils become professional teachers. A professional gather information about a problem, has a knowledge base of possible alternative strategies, is aware of the probable consequences of employing each strategy and then chooses the strategy that is most appropriate for the goals to be achieved. Professional decisions are made within the context of a cognitive belief structure. Yet research about "teacher thinking" suggests that many teachers operate primarily on the basis of tacit knowledge (Brophy, 1980; Shavelson and Stern, 1981; Clark and Peterson, 1986). Although some degree of tacit thought may always be involved in any human endeavor as complex as instruction, inexplicable knowledge is neither an ideal nor even an acceptable basis for making professional decisions. Berliner (1983) reported that the teachers in one large scale study "were unable to do the analysis (of different types of teaching) and, therefore, they were unable to compare the relative costs and benefits of one form of instruction over another for different kinds of students." Mumby (1982) reported similar findings. Because models explicitly identify the knowledge base and the instructional variables involved, they enable teachers to reflect analytically about their instruction. The essence of a models approach is thoughtful selection from a range of alternatives the strategy that is most appropriate for a teacher's purpose and for the students in the class. Instructional models can help pupils in a methods course to become rational professionals who make and implement effective decisions in an uncertain and complex environment.

Models are based on an analysis of the structure of the knowledge to be taught and learned. A knowledge structure is an abstract representation that shows relationships among different types of information (e.g., among facts; concepts; conceptual structures - hierarchies, taxonomies, and matrices; principles -descriptive, correlational and casual propositions; and theoretical structures). Pupils in a social studies methods course must have conscious cognitive control over the ideas that comprise structures of knowledge in their subject area disciplines. B. O. Smith (1983) makes the point very clearly:

> "... in all instruction information is central. The teacher and the student interact in and through the content. To teachers ... content is the lifeblood of their occupation, for where there is no knowledge to be taught, there is little to be learned. To teach is not only to know the content, but also to analyze it, to take it apart and put it together in new relationships, to understand and analyze its types, utility, biases, and the pitfalls the learner is likely to encounter in the course of learning."

Pupils who lack an intact knowledge structure are very likely to find meaningless the analytical distinctions among types of information that are necessary to comprehend and apply instructional models. Recognition of the kind of content to be taught is the first step in selecting an appropriate model. Further, because a model prescribes an optimal sequence for the presentation of different types of information, successful implementation requires the ability to make conceptual distinctions. If a pupil has a thorough grasp of some social science discipline, a models approach can successfully teach the intellectual skills necessary to analyze content in preparation for instruction. Once pupils have learned to apply these skills to one knowledge base, they can easily transfer their analytical abilities to any other body of organized information they may teach in the future.

Models are based on an understanding of cognitive processes and learning theories. The essential challenge that all teachers face is to arrange conditions in a student's environment so that the internal processes of learning will be activated, supported, enhanced and maintained. Knowledge of the learning theory upon which a model is based is an integral part of understanding the model. To be effective, instruction must mesh with the mental processes that students muse use to learn. It is possible and often necessary to teach cognitive learning strategies to students (Weinstein and Mayer, 1986). Both the planning and the implementation of instruction are based on predictions that certain teaching actions will influence students' thinking procedures in ways that facilitate

achievement of the desired learning. Teachers who have a clear and detailed comprehension of the learning theory upon which a model is based will be able to make better predictions than teachers who lack such understanding.

Few social studies methods texts, unfortunately, explicate the learning theories that underlie the teaching methods suggested. One of the most significant learning theories for a models approach is information processing theory, which describes how the human mind selects, comprehends, organizes, stores, and at appropriate times retrieves and applies information (Travers, 1982; Wessell, 1982). Professors need to help their pupils comprehend relevant learning theory and perceive the connection between specific teaching actions and particular learning processes.

In summary, knowledge of an instructional model is a complex understanding. It involves a conceptual grasp of the particular kind of content and intellectual skills the model was designed to help students master. It entails a vivid image of the sequence of steps a teacher takes and a grasp of the range of tactics available for accomplishing each step. It requires a detailed understanding of the learning theory upon which the model rests. To quote Joyce and Weil (1980) "principles of teaching are not conceived as static tenents but as dynamically interactive with social and cognitive purpose, with the learning theory underlying procedures, ... and with the personal and intellectual characteristics of learning groups."

Models for Social Studies Teachers

Far too many instructional models exist to teach them all adequately in a single methods course, so decisions must be made about which ones are mose useful for social studies teachers. Because a model is viable only for speicific and limited purposes, depending upon the content and processes students are expected to learn, beginning teachers should master a basic "repetorire" of models that corresponds to the range of major learning goals in the social studies curriculum. No consensus exists about which models should comprise a basic repetorie. Nevertheless, professors must make that judgment.

A classification system to organize the universe of models can clarify the factors that are related to that decision. Models can be classified in four useful ways: according to their family membership, their strategic approach, their content inclusiveness, and their complexity. All four dimensions should be considered when selecting models for a social studies methods course.

Joyce and Weil (1980) distinguish among four "families" of models: the information processing family, the personal

family, the behavioral family, and the social interaction family. Those categories are based on the similarity of the principle learning outcomes of the models within each family. The two families most appropriate for social studies teachers are the information processing and social interaction families. Information processing models are designed to help students comprehend and apply abstract knowledge and to use intellectual skills, including the capacities to generate concepts, apply generalizations, and solve problems. Social interaction models emphasize the relationship of an individual to society or to other persons in group situations and seek to improve a student's ability to relate effectively to others and to engage in democratic processes.

Within the information processing family, models can be divided into two categories based on their strategic approach to instruction: inductive and deductive strategies. From an instructional perspective, the key difference between them is the sequence in which various types of information are presented to students. For example, the two models in Figure 1 both present the same information, but in a different order. Variation in sequence effects the learning processes that students must use. Deductive models activate processes necessary for meaningful reception learning of abstract ideas, while inductive models require discovery learning of abstractions. The knowledge taught is the same for both strategies, but the processes that students use are different. Notice that the application activities are the same for both models. Learning is not complete when students have comprehended an abstraction; learning also involves the ability to retrieve that idea from long-term memory and apply it meaningfully in new situations. Unfortunately, many "discovery" models described in social studies methods textbooks and published lesson plans based on those models stop instruction at a point when students have presumably comprehended an idea and contain no application tasks. Such instruction is seriously flawed.

For many, though not all, deductive models there is an inductive counterpart. For example, Beyer (1985) presents two models to teach critical thinking: the directive (i.e., deductive) and the inductive approaches. When possible, a paired set of models should be presented to pupils. The direct comparison highlights distinctions between the models and, perhaps more importantly, illustrates their similarities. Because both approaches present the same information, but in a different order, a teacher who is adequately prepared to teach an idea or skill with one model is also prepared to teach the same idea with the other model. That insight helps pupils to see the flexibility of the model's approach to instruction and demonstrates that inductive teaching is both feasible and within their range of competence.

Within the social interaction family no distinction exists that is similar to the inductive-deductive dicatomy in the information processing family. Social models are usually described as inductive approaches, and they are certainly useful in that way. It is possible, however, to incorporate social models into a deductive sequence. For example, the "social participation" lessons in American Government: Comparing Political Experiences (Gillespie and Lazarus, 1979) develop comprehension of participatory citizenship roles with a deductive model and then use role play, a social model, as an application activity. This example again illustrates that instructional models are not rigid presciptions, but rather are tools that a teacher can use flexibly to accommodate different classroom contexts.

A third dimension for classifying models is the distinction between micro- and macro-models (Reigeluth, 1983). Micro-models are designed to teach a single category of content (i.e., a concept or a generalization or a skill). For example, the models in Figure 1 are both micro-models. Macro-models are designed to organize a sequence of instruction that encompasses more than one type of content. The advance organizer model and the epitomine model (Reigelth, 1983) are both examples of macro-models. Macro-models are useful for planning and organizing large chunks of instruction such as units, topics, and even courses. Social studies teachers need to master a variety of micro-models and at least a few macro-models.

Finally, models vary in their degree of complexity. Complex models tend to require highly developed adaptive teaching tactics and, therefore, demand both a sophisticated understanding of the content to be taught and a thorough grasp of the intellectual processes involved in learning it. Complex models are not only difficult for teachers, but are also challenging for students because of the heavy demands they place upon the information processing system. Therefore, it is vital that teachers who use them be prepared to provide appropriate learning guidance to students. The dimension of complexity is a basis to distinguish between basic and advanced level models. Undergraduate methods courses should ensure that every pupil demonstrate the ability to implement a range of basic models sufficient to teach all of the major content goals of the social studies curriculum. The social studies profession may not be able to guarantee that every student be taught by a master level teacher, but it should at least insure that no student is taught by an incompetent teacher, one who lacks any clear means to facilitate learning of the goals of social education.

The dimensions of family membership, strategic approach, content inclusiveness, and complexity are combined to form the classification system portrayed in Figure 2. Some models

that this author recommends for consideration are identified, along with sources of information about each model. Each model is labeled as appropriate for beginning level teachers (basic models) or for master level teachers (complex models). The beginning level models suggest a range from which a basic repetorie might be selected.

The classification system might be useful to professors as a means of locating in context the particular models they now teach and deciding whether their courses contain an adequate range of models. Professors concerned with curriculum development in the content areas (e.g., law related or global educators) might also find the classification system useful. They often want more time devoted to these content areas in methods courses. One way to accomplish that goal is to develop a "source book" containing detailed and exemplary lesson plans to illustrate how each of the models identified in Figure 2 could be used to teach content in their subject area. Economic educators have recently published two such "books": Using Economics in Social Studies Methods Courses (Weidenaar, 1982) and Economic Education in the Social Studies Methods Course (Williams, 1984). Both contain exemplary lesson plans with enough detail to show pupils how many of the models in Figure 2 can be implemented.

A Model for Educating Teachers

The single most extensive collection of theoretical and empirical studies about teaching teachers to use instructional models is in a volume entitled Flexible Teaching (Joyce, et al., 1981). Bruce Joyce's teacher education model identifies four distinct levels of learning that can result from a training program. It also specifies five instructional steps that help pupils to achieve the highest level of learning.

Acquiring an instructional model involves progressive movement through four stages of learning. Only when the fourth level is achieved have pupils mastered the model. The four levels are identified and illustrated as follows:

1. Awareness. At this level pupils are cognizant that a particular model exists. For example, the first stage in learning the general inductive model for teaching concepts is to become conscious of the approach, its uses, and how it fits into the social studies curriculum. Awareness entails an effective appreciation of the importance of the knowledge and processes the model is designed to teach. Philosophical ideas from social studies rationale need to be considered at this stage to show how the goals of the model relate to citizenship education.

Figure 2. Instructional Models for Social Studies: Beginning (B) and Master (M) Level Teachers

Content Inclusiveness	Families of Instructional Models		
	Information Processing Family		Social Interaction Family
	Deductive Strategy	Inductive Strategy	
Micro-level Facts	Memory Model(B) (Joyce & Weil,1980; McKenzie,1980)		
Concepts	General Deductive-Concepts(B) (Eggen,et.al,1979; Klausmeir,1980; Ehman,et.al,1974)	General Inductive-Concepts(B) (Eggen,Ehman) Concept Attainment-Reception,Selection, Generation(M),Clarification (B) (Eggen;Weil & Joyce, 1978-a) Taba-Listing,Grouping, Labeling(B) (Eggen; Taba, et al., 1971)	Role Play (B)
Empirical Principles (Generalizations)	General Deductive-Generalizations(B) (Eggen)	General Inductive-Generalizations(B) (Eggen) Taba-Data Retrieval (B) (Eggen,Taba) Social Science Inquiry (M)	Simulation(B) (Gillespie,1972; Weil & Joyce, 1978-b)
Skills	Direct Instruction-Alogrithmic Skills (B) (Rosenshine, 1986; Askov & Kamm, 1982) Directive Strategy-Alogrithmic & Heuristic Skills (B) (Beyer,1985)	Inductive Strategy-Heuristic Skills (B/M) (Beyer) Algo-Heuristic Theory of Instruction-Heuristic Skills (M) (Landa,1983)	
Values/ Normative Principles			Cognitive Moral Development-Kolberg(B) Modified Jurisprudential Model (B/M (Ehman) Jurisprudential Model/(M) (Newmann 1970; Weil & Joyce-b)
Macro-level			
Theories-Topics, Empirical-Normative	AdvanceOrganizer(B) (Eggen; Weil & Joyce-a)	Epitomine Model (M)(Reigeluth and Stein, 1983) Cognitive Theory of Inquire (M) (an operational model of reflective inquiry) (Collins,1977; Collins & Stevens, 1982 & 1983)	Policy Decision Making Model (B) (Kurfman, 1977)

2. Knowledge of Instructional Concepts and Principles. At this level pupils gain intellectual control over the concepts and principles that comprise the model to be learned. For example, the models depicted in Figure 1 contain many concepts ("definition," "critical feature," "example," "non-example," "superordinate" and "coordinate"), all of which must be comprehended to understand the model. Instructional concepts identify variables that a teacher can control when the model is implemented; instructional principles assert the probable effects of manipulating a variable on student learning. For instance, there is an instructional "concept called 'alternative representation,' which is a different way of communicating (some information) that has already been said or shown. It might be a paraphrase of an earlier statement, or it might be a diagram that says the same thing visually as was just said verbally" (Reigeluth, 1983). An illustration of an instructional principle is this assertion: if the content being taught is relatively difficult for students, then the use of alternative representations will help students to comprehend and retain the knowledge better than they otherwise would. Instructional concepts direct attention to factors that make a difference; instructional principles predict the likely consequences of manipulating a variable. At this stage, pupils develop a cognitive structure for a model based on comprehension of relevant instructional concepts and principles.

3. Mastery of Techniques. At this level, pupils develop the competence to act on the basis of their cognitive structure. The word technique refers to knowledge that is precise, specific, and practical. For example, the second step of the general deductive model in Figure 1 is "clarification of abstraction" to emphasize a concept's critical features. After presenting a definition verbally and writing it on the board, a teacher can use any of a variety of techniques to direct student attention to critical features. The teacher can verbally direct attention to those features [e.g., "Notice in the definition, that (name of concept) are similar in (number of characteristics) ways. First, they all have ...."]. Questions can also be used to direct attention to critical features [e.g., "How are all (name of concept) alike?", or "What would you be looking for if you wanted to decide whether something was an example of (name of concept)?", or "All (name of concept) are similar in (number of attributes) respects. What are they?"]. These questions encourage students to notice and code information about a concept's critical features.

Skilled implementation of a model depends upon mastery of appropriate techniques. The organized knowledge gained at stage two is unlikely to effect a teacher's classroom behavior unless it is supported by appropriate technical skills. Yet, technical knowledge must be applied within the context of a cognitive structure of instructional concepts and principles. For example, the previously cited techniques for directing attention to a concept's critical features were designed to support student's cognitive processes by getting them to encode certain information as a result of teacher prompts. Such prompts are helpful in some situations but may be harmful to students in other circumstances. To quote Tobias (1982),

> "....providing additional instructional support is likely to increase the students' cognitive processing of instructional input for new material. In the absence of ...support, new material might be so strange or difficult, and induce so much frustration and uncertainty, that [information is missed] or otherwise minimally attended to." But "providing instructional support to students who have substantial experience with a subject [or cognitive processes] may do little to increase achievement, and may actually be counterproductive. The extra support might ...cause enough boredom, carelessness, or fatigue to reduce achievement compared to a 'learner' instructional strategy."

An instructional principle to govern the use of techniques for prompting attention to critical features would be this one: if pupils have had little experience in interpreting the information given in a concept's definition, or if a student's paraphrase of a definition omits a critical feature, then techniques to direct attention to those features will help students to encode necessary information. A cognitive structure for a model without knowledge of techniques is vacuous, knowledge of a technique without a cognitive structure is mindless. Both kinds of knowledge are necessary for effective and professional teaching.

4. Problem Solving Competence. At this level organized knowledge and technical skills are transferred to classrooms. The model is refined in practice, adapted to various contingencies, and integrated with other models in a teacher's repertoire.

Pupils need to become aware of a model, acquire a cognitive structure to think systematically about it, and develop the technical skills required to implement it. But a model is never thoroughly mastered until pupils can implement

it in the complex environment of a classroom.

A powerful training program is needed to help pupils to achieve that level of mastery. Research indicates that effective training requires presentation of theory, concrete demonstrations, ample practice, structured feedback, and, sometimes, coaching for classroom application (Joyce, 1981; Showers, 1983; Kilgore, 1984). Joyce recommends a five step training program, which is described as follows:

1. Presentation of the Model. The first step is to provide a description of the model, along with its curriculum rationale and its relation to a learning theory. Identification and classification of the instructional concepts and principles embedded in the model occurs during this step, as does discussion of its potential uses and limitations.

   Many social studies methods textbooks never move beyond this step (Stanely, 1984). Joyce's research indicates that when training consists solely of the presentation of a model, very few teachers acquire necessary technical skills and almost none can apply it in classrooms. But, if presentation is used in conjunction with the other components in his training model, then it enhances cognitive structure, facilitates skill development, and promotes classroom application.

2. Demonstration of Model. This step involves showing pupils an exemplary enactment of the model, either through live demonstration, films, or printed transcripts of a teacher implementing it. Nearly all professors have favorite lessons they like to teach for demonstration purposes. These are fun to do. The impact of demonstrations depends upon how pupils perceive the activity. They may view it as an instance of replicative learning. Nearly all pupils are capable of copying, to some degree, a lesson that they have seen someone else teach. This orientation is often called the "bag of tricks" approach to a methods class.

   Imitation learning is not the purpose of demonstration. Its purposes are to clarify the concepts and principles of a model by providing a concrete example and to illustrate at least some technical skills for implementing it. To achieve these purposes, demonstration lessons must be rigorously analyzed in relation to the knowledge presented in step one. Pupils must discuss how each stage of the model was evident in the demonstration. Any points of departure from the model should be identified. Examples of relevant technical skills evident in the demonstration must be named and defined.

Joyce notes that several demonstrations are almost always required for complex models. One or two demonstrations have only a weak affect. He also reports that for most pupils demonstration alone is unlikely to result in the development and application of skills unless it is accompanied by other components of the training model.

3. Practice Under Simulated Conditions. This step involves trying out a new model. It provides an opportunity to enact technical knowledge and use cognitive structure as a guide for choosing, sequencing, and implementing a set of tactical skills. Initial practice with a new model, especially if it is a complex one, should occur in simplified situations that allow pupils to concentrate primarily on the skills necessary to enact the model without devoting attention to the demands that impinge upon a teacher's thought processes in the complex classroom environment.

   Peer- and/or micro-teaching sessions provide opportunities to practice a new model. Research indicates, however, that just the experience of peer- or micro- teaching is not enough to affect the quality of subsequent teaching performances in classrooms (Schalock, 1979). These sessions appear to have a high impact only when pupils have developed a clear and stable cognitive structure for a model prior to the micro-teach and when they are accountable for demonstrating their ability to implement it. Mastery of complex models usually requires several practice sessions before pupils develop both competence and confidence with that approach.

4. Feedback. Feedback helps pupils become more aware of their teaching behaviors and can promote knowledge of a range of alternative techniques. Joyce identifies two types of feedback: structured and open-ended. Structured feedback is based on a system for observing defined, but limited details of teaching behavior. (The evaluation instruments in Figure 3, which will be discussed later, both illustrate structured feedback systems.) These systems are narrowly focused, they do not encompass all facets of a teaching performance, and thereby achieve the desired degree of precision. Open-ended feedback consists of informal discussion after observation of a teaching performance and may cover many aspects of the performance, but without as much detail as a structured system.

   Joyce's research indicates that initial practice followed by structured feedback is a powerful means to develop the skills involved in using an instructional model. Open-ended feedback has an uneven impact; some

pupils appear to benefit from it, but many others do not. The power of structured feedback is enhanced when pupils are provided with an opportunity to reflect on their own performances based on the system. Both types of feedback have utility. Structured feedback is beneficial during initial attempts to use a model; open-ended when a pupil is "fine tuning" the model.

5. Coaching for Application. For most preservice or inservice teachers, demonstration of a new model combined with presentation of appropriate theory and opportunities for practice followed by structured feedback, yield sufficient learning for them to implement a model successfully in classroom situations. Yet, many other pupils need direct coaching. This step involves helping pupils to analyze content, to develop detail lesson plans based on the model, and to rehearse, mentally, tactics for implementation.

Time is needed to master a model. A gradual progression of learning activities is necessary to provide an opportunity for ideas to be assimilated and techniques to be refined to the degree that a pupil can actually use a model. A models approach requires making difficult decisions because only a select number of models can be taught and mastered in the short time available to professors and pupils in an undergraduate methods program. Attempts to "cover" every approach to instruction are likely to make pupils aware of many models, but masters of none. To make any real difference, methods courses must focus on a select number of models that will enable future teachers to teach the fundamental aspects of the social studies curriculum to their students. Professors must devote the time and provide the instruction needed for their pupils to master that basic repertoire.

Not all pupils are equally prepared to benefit from a models approach. The ability to comprehend and master a variety of instructional models is related to a pupil's conceptual level, a construct that refers to variation along a continuum that ranges from concrete to abstract thinking. Teachers at higher levels are more flexible, more capable of using alternative solutions, and more stress- tolerant than those at lower conceptual levels (Hunt, 1981). Both preservice and inservice teachers at higher levels acquire a repertoire of models more easily than those at more concrete levels. Lower level pupils have difficulty grasping the idea of a repertoire consisting of distinct models, with each one being appropriate for specific but limited purposes, and instead expect a single approach to be appropriate for all purposes (Shigaki and Brown, 1981). The ability to comprehend and implement inductive models is related to conceptual level (Hunt and Joyce, 1981). A high conceptual level does not automatically lead to mastery of an

instructional model, instruction and practice are still necessary, but it may be a prerequisite for success (Joyce and Showers, 1982). Lower level pupils require a lot of coaching for application if they are to become effective social studies teachers.

Models in Methods Courses: Applications of Training Theory

If a methods course fails to provide preservice pupils with clear and viable instructional models designed to achieve the goals of social education, then pupils will invent their own approaches when faced with the demands of teaching in a real classroom. Generations of social studies teachers have continuously re-invented an approach called textbook teaching (Shaver, et. al., 1979; Goodlad, 1984). Mastery of appropriate models enables pupils to raise above low level textbook teaching and instead make a significant contribution to citizenship education.

This section provides a few specific examples of how Joyce's training model might be applied in social studies methods courses. The description is not a comprehensive compendium of procedures for implementing a models approach, rather it suggests some practical applications for consideration.

Professors who wish to incorporate models into their course will often find it necessary to research the sources identified in Figure 2 to prepare a "presentation of the model." Social studies methods texts do not always provide adequate information to help pupils develop awareness and organized knowledge of a model. Stanley (1984) investigated 37 texts for their adequacy regarding concept instruction and concluded:

> The results of this study indicate that most social studies methods texts do not provide sufficient information and guidelines for concept instruction. Among the most serious deficiencies in the tests are a failure to: (1) adequately define concepts; (2) discuss research regarding concept instruction; (3) relate concept definitions and research findings to the process of instruction; (4) discuss the limitations of the instructional strategies they support; and (5) offer specific guidelines for applying instructional strategies in the classroom. Given the significance of concept instruction in social education, these are serious shortcomings.

For another example, many texts limit their presentation of "discovery" models to a description of internal learning processes but do not describe the specific actions teachers can take to activate these processes. No texts adequately describe the cognitive processes that students when learning

or the tactics teachers can use to activate these learning strategies (Armento, 1986).

The language used to describe an instructional model needs to be carefully constructed. Professors who draw on the sources cited in Figure 2 may want to revise some of the language used by these authors. For example, although this writer has great respect for Weil and Joyce (1978a-b), they use language that is difficult and confusing for pupils. The language used to present a model should be of a relatively low level of abstraction so it describes each step precisely. Yet, it must be abstract enough to subsume a number of different techniques for conducting each step. As a whole, the model must be comprehensive enough to include all of the salient teaching actions required to implement it and yet contain a small enough number of steps to permit a teacher to keep the entire model in mind within the limited amount of space available in working memory.

Most presentations of models follow a deductive sequence: presenting a description of an abstract set of ideas about teaching followed by a concrete demonstration. Sometimes it is useful to vary the sequence and have students "discover" a new model through an inductive sequence such as the following:

- Name the model, but do not describe it.
- Teach a demonstration lesson that clearly illustrate the major instructional steps.
- Ask pupils to identify verbally the kind of knowledge taught (was it a fact, concept, generalization, skill, value?). Ask pupils to describe verbally the processes they used to learn that content.
- Ask pupils to write a description of the model by listing the major instructional steps in sequence.
- Teach a second demonstration to teach a different idea with the same model. Ask students to decide whether the steps they previously listed occurred in the second example.
- Ask students to revise their model descriptions; then have several write theirs on the boards.
- Discuss these, requiring pupils to cite concrete parts of the demonstration where they thought a step occurred and, if appropriate, reconciling and combining ideas from different pupils' models.
- Present a handout that describes the model, relate pupil ideas to it, and move to a discussion of the

model's rationale and theory.

Two useful demonstration lessons for applying this strategy to help pupils learn the inductive model depicted in Figure 1 are lessons 1.4 (concept of opportunity cost) and 1.6 (concept of voluntary exchange) in Weidenaar (1982). Each one requires only about ten minutes to teach, and both of them provide clear and sound examples of the model. Professors should show that they use the models they want their pupils to learn.

Another way to present a new instructional model and, simultaneously, to develop an intellectual skill is to begin by challenging pupils to create their own model. This approach not only arouses interest in the model to be learned, but also teaches the skill of model building. That skill is transferable. It helps to prepare pupils to deal with future developments in social studies instruction. The future will surely (hopefully?) bring new and powerful ways of educating citizens. Professional teachers need the skills necessary to construct and test their own models of instruction.

Instructional models can be derived from at least three different knowledge bases, or from some combination of them. A model can be inferred from a theory, either a theory of learning, (e.g. Ausbel's Advance Organizer) or an idealized description of human competence (e.g. reflective thinking or decision-making models). A model can be designed from research (e.g. Bruner's Concept Attainment). Or a model can be induced from systematic observation of exemplary teachers implementing the model (e.g. Collins and Stevens' Theory of Inductive Teaching). Pupils in a methods course can be given the experience of creating their own models and receive feedback about its quality.

To illustrate this approach, consider how it might be applied to help pupils learn instructional models designed to teach critical thinking skills:

- Assign pupils to read two articles, "Improving Thinking Skills-Practical Approaches" (Beyer, 1984) and "Critical Thinking: What Is It?" (Beyer, 1985-b), as preparatory homework. Those sources clarify the nature of critical thinking and provide some hints about instruction to teach it, but neither explicates a complete and organized model.

- Divide the class into small groups and assign the task of drafting a model designed to teach critical thinking.

- Synthesize/reconcile ideas by having each group write its model in the board and verbally clarify and

justify it. Discuss similarities and differences among the models.

- Assign "Teaching Critical Thinking: A Direct Approach" (Beyer, 1985-a) which describes and illustrates two models to teach critical thinking. (Pupils are often surprised and enlightened to discover that an inductive model can be used to teach a skill). Have students compare their models to those Beyer presented and reconcile differences.

- Provide detailed lesson plans that illustrate both models for teaching critical thinking skills. Useful plans can be found in Smith (1983), O'Reilly (n.d.), and Munro and Slater (1985). Analyze these plans using the methods described later in the paper.

This approach can be used for other models as well. For example, pupils could be assigned readings that describe Kolberg's Theory of Cognitive Moral Development and shown a film strip about that learning theory, be challenged to create a model of instruction to promote moral development, and then contrast their ideas with Fenton's model.

This approach reflects a problem solving orientation to instruction - creating a solution to the problem of how a teacher can facilitate learning of certain content goals. It helps pupils to make their ideas about instruction less tacit and more explicit. Professional teachers need to be able to explicate their ideas about instruction so these ideas can become an object for reflective self-analysis.

After a model has been presented and demonstrated, pupils will still need instruction designed to help them to clarify their cognitive structure of the model and to develop needed technical skills. An activity for accomplishing those goals is the analysis of detailed lesson plans.

Often this step is omitted in methods courses. A sequence of instruction that moves from presentation and demonstration of a model to an assignment that requires pupils to construct their own original lesson plans is premature. It will very likely yield simplistic work based on superficial understanding. Ample instruction and thought are required before pupils will be ready to create original lesson plans of high quality.

The lesson plans selected for an analysis exercise must not only be sound examples of the model being studied, but they should also reflect the criteria of good planning. They should be fairly detailed, containing suggested teaching procedures, substantive content to present, questions to ask, and learning activities for students. For example, lesson plans that provide excellent illustrations of the deductive

model described in Figure 1 are the following: (a) Lesson 3 "Systems and Their Characteristics: Culture, Socialization, and Values" (Fraenkel, et. al., 1977); (b) Lesson 1, "Money" (Federal Reserve Bank of Minneapolis, 1979); and (c) Lesson III-1, "The Principle of Federalism" (Patrick and Remy, 1985). Exemplary plans for the inductive model are these: (a) Lesson One, "What is Authority" (Law in a Free Society, 1977). (b) Lesson One, "What Is Political Behavior?" (Mehlinger and Patrick, 1972); and (c) Lesson 2, "Characteristics of Totalitarianism" (Thompson and Hedberg, 1977). A valuable source of useful plans for analysis is, as the title of a symposium at the 1985 NCSS convention indicates, the "old 'new social studies' projects." The substantive content of the lesson plans ought to reflect ideas and skills generally taught in social studies courses (i.e., avoid esoteric topics). By the end of a methods course pupils should have a collection of viable lessons for each model studied, and those plans may facilitate early attempts to apply a model later in their own classrooms.

The purposes for analyzing lesson plans are to help pupils (1) to clarify and apply the organized knowledge of a model, (2) to develop analytical skills for planning instruction, and (3) to develop knowledge of techniques for implementing the model. Five types of questions can be used to achieve these goals. They are named, defined, and illustrated as follows:

1. Model Identification/Classification Questions. These questions ask pupils to show correspondence between the steps in the abstract model and specific teaching acts described in a lesson plan. For example, (a) "What model does this plan represent?", (b) How does the plan follow the model?", (c) "Does it depart from the model at any point?", (d) "Where is the abstraction presented?", (e) "Are examples presented?", or (f) "Are non-examples presented?"

2. Questions about Instructional Technique. These questions ask pupils to identify the functions of specific teaching techniques suggested in the plan. Function is identified by stating "correct/ reasonable" hypotheses about the effects of a teaching technique upon student learning processes. Hypotheses must reflect reasoned inferences based on the learning theory that undergirds the model and that was presented to pupils in step one of the training program. These questions provide practice in applying a learning theory. More generally, the questions promote a view of instruction as hypothesize-testing activity in which a teacher consciously anticipates the impact of teaching behaviors and systematically observes whether the consequences are congruent with the expectations. For example, (a) "Are there any teaching actions

suggested in the plan that might help to promote transfer of learning?", (b) "Look at the six questions suggested at this point in the plan. Which one is designed to elicit a generalizing inference from the students?" "Why were the other four raised first?", or (c) "Which question on the list gets students to process information about the concept's critical features?" By applying this kind of analysis to a variety of lesson plans, pupils begin to develop knowledge of a range of alternative techniques for accomplishing each phase of the model.

3. Thought Experiment Questions. These questions describe hypothetical situations that might occur during a lesson and require pupils to consider how they would deal with these contingencies. The purposes of thought experiments are to help pupils learn (a) to anticipate a range of alternative student behaviors that might arise during the implementation of a model and (b) to develop some techniques to deal with these situations. For example, (a) "Question 3 in this inductive lesson asks students to name ways in which all four examples of the concept are alike. Suppose you called a student to answer it and he said, 'I don't know.' What question(s) could you ask to hint or direct the student to notice a critical feature?" or (b) "Looking at question 3 again, suppose a student gave this response to it (professor gives a wrong answer but does not label it as such). How do you react to the student?" Practice can be provided if these questions require a "mini-role play" response that requires pupils to enact, and not merely to describe, the technique they would use. Justification for the technique employed should be discussed and then followed by identification and assessment of alternative tactics.

4. Evaluation Questions. These questions ask pupils to assess the quality of the lesson. There are two types of evaluation questions that should be raised. The first are questions to appraise the quality of effectiveness of selected parts of the plan. For example, (a) "Does the example given on page 10 depict the concept's critical or (b) "Are the six questions on page 14 of this lesson worded clearly?, Or are some ambiguous? How should it be re-worded?"

   The second type of evaluation question focuses on curriculum rationale for social education. These questions require pupils to use ideas from previously studied philosophy and rationale documents in social studies and to do philosophical thinking to assess the significance of the content taught in a lesson. For example, (a) "Does the content in this lesson contribute to effective and responsible citizenship in some way?"

or (b) "Imagine you started this lesson by telling students the three objectives and a boy in the back of the room asked, 'Why do we 'gota' learn that?' How would you respond to his question?" Philosophical thinking is not easy for most pupils and they need repeated opportunities to practice it if they are expected to use the normative principles of social education as guidelines for decisions in their own classrooms.

5. Modification Questions. These questions require pupils to use their knowledge of models for adapting lesson plan. They reinforce the idea that models are tools to aid teacher decision- making and not prescriptions to replace it. For example, (b) "Based on your evaluation of this plan, what changes would you make in the instruction?", (b) "Suppose you wanted to convert this deductive lesson to an inductive approach. How would you change the plan?", or (C) "Suppose you want to include about ten minutes of instruction about a values issue in this lesson. Where could you develop that? What model of values teaching could you use?"

The knowledge and skills taught through these analytical exercises can be partially measured with essay examinations in which pupils are given a new lesson plan and required to respond to a set of analytical questions tailored to it. Analysis of lesson plans helps pupils to assimilate, integrate, and apply ideas about instruction.

Practice is required to develop and to polish the technical skills needed to implement an instructional model. Consequently pupils need to teach lessons based on the model while they are in the process of learning it. Research suggests that pupils receive too little information about techniques for implementing models. Regarding the information given in social studies textbooks about concept instruction, Stanely (1984) observed that ".... almost all of the texts fail to give explicit guidelines for how to employ the strategies they advocate ..." Micro-teaching sessions are powerful means to facilitate mastery of technical skills. To be effective micro-teaching should be preceded by development of a stable and comprehensive cognitive structure that defines a model and should be followed by structured feedback. Figures 3-a and 3-b contain observation/ instruments for the two instructional models presented in Figure 1.

The instruments can be used before, as well as after, a micro-teach session. They convey expectations of what pupils are to demonstrate in a session. Pupils can use the system to analyze and evaluate demonstration lessons that their professor teaches to illustrate a model. They can be applied to selected video-tapes of exemplary micro-teach lessons taught by previous pupils in the course. It encourages

Figure 3-a. Structured Feedback for Deductive Model

SECOND MICROTEACHING EVALUATION
DEDUCTIVE MODEL

Name _____ Micro-Teach ..2..

Professor _____ Clinical Instructor _____ Section _____

Teaching Field _____ Score _____ (Grade _____)

Scoring system

2 points Demonstrated and of high quality
1 point Partially evident
0 points Not demonstrated or of poor quality

GENERAL DIMENSIONS OF TEACHING PERFORMANCE

1. Demonstrates acceptable COMMUNICATION SKILLS 2 1 0

2. Presents information with CLARITY 2 1 0

3. Exhibits a TASK ORIENTED approach to instruction 2 1 0

4. INTERACTS WITH STUDENTS regarding academic content 2 1 0

5. Demonstrates ENTHUSIASM toward teaching and the topic 2 1 0

LESSON IMPLEMENTATION OF BEHAVIORAL DEDUCTIVE MODEL FOR CONCEPTS

PRESENTATION

1. PRESENTS ABSTRACTION

1a. Presents complete DEFINITION OF CONCEPT (name, superordinate concept, critical features) 2 1 0

1b. Provides a WRITTEN version of concept DEFINITION 2 1 0

2. CLARIFIES ABSTRACTION

2a. Presents or elicits a PARAPHRASED CONCEPT DEFINITION 2 1 0

2b. Directs attention to terms describing CRITICAL FEATURES 2 1 0

3. RELATES CONCEPT TO OTHER ABSTRACTIONS

3a. COMPARES/CONTRASTS CONCEPT with related prior learning or general body of knowledge familiar to students 2 1 0

3b. Conveys SIGNIFICANCE of concept 2 1 0

4. PRESENTS EXAMPLES AND NON-EXAMPLES OF CONCEPT

4a. Presents EXAMPLES where concept critical features are observable 2 1 0

4b. Presents examples which, as a set, illustrate the FULL RANGE of the concept category 2 1 0

NUMBER OF EXAMPLES CONSIDERED _____

4c. Directs attention to EVIDENCE OF CRITICAL FEATURES in examples (using questions, statements, or other means) 2 1 0

4d. Presents NON-EXAMPLES that lack one or more critical features of concept 2 1 0

4e. Presents non-examples which, as a set, DELIMIT the concept from related abstractions with which it could be confused 2 1 0

NUMBER OF NON-EXAMPLES PRESENTED _____

4f. Directs attention to how CRITICAL FEATURES DISTINGUISH between examples and non-examples 2 1 0

CONTENT PRACTICE - USE OF ABSTRACTION

5. Presents ADDITIONAL examples AND requires students to identify how concept CRITICAL FEATURES are portrayed OR (5 or 6) 2 1 0

6. Presents a set of EXAMPLES AND NON-EXAMPLES for students to identify AND requires students to justify responses in terms of concept CRITICAL FEATURES

7. Requires students to GENERATE THEIR OWN EXAMPLES of concept AND justify responses in terms of concept CRITICAL FEATURES 2 1 0

NUMBER OF EXAMPLES PRESENTED BY TEACHER OR STUDENTS _____

NUMBER OF NON-EXAMPLES PRESENTED BY TEACHER OR STUDENTS _____

8. ENCOURAGES STUDENTS TO VERBALIZE concept name, definition, and critical features 2 1 0

INSTRUCTIONAL MEDIA USED TO DEPICT CONCEPT EXAMPLES AND NON-EXAMPLES

Verbal description (teacher)	_____	Pictures	_____
Verbal description (other)	_____	Slides, filmstrip	_____
Printed description (case study, excerpt, illustration)	_____	Movie, videotape	_____
		Enactment, role-play	_____
Diagrams, charts, graphs	_____	Realia (actual examples)	_____
Other (list)	_____		_____

GENERAL REACTIONS
Strengths:

Two specific things you should do to improve your teaching:

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Figure 3-b. Structured Feedback for Inductive Model

THIRD MICROTEACHING EVALUATION
INDUCTIVE MODEL

Name _____ Area Teach _____

Professor _____ Clinical Instructor _____ Section _____

Teaching Field _____ Score _____ Grade _____

Scoring system

2 points Demonstrated and of high quality
1 point Partially evident
0 points Not demonstrated or of poor quality

GENERAL DIMENSIONS OF TEACHING PERFORMANCE

1. Demonstrates acceptable COMMUNICATION SKILLS 2 1 0
2. Presents information with CLARITY 2 1 0
3. Exhibits a TASK ORIENTED approach to instruction 2 1 0
4. INTERACTS WITH STUDENTS regarding academic content 2 1 0
5. Demonstrates ENTHUSIASM toward teaching and the topic 2 1 0

LESSON IMPLEMENTATION OF GENERAL INDUCTIVE MODEL FOR CONCEPTS

PRESENTATION

1. PRESENTS EXAMPLES AND NON-EXAMPLES OF CONCEPT

1a. Presents EXAMPLES where concept critical features are observable 2 1 0

1b. Presents examples which, as a set, illustrate the FULL RANGE of the concept category 2 1 0

NUMBER OF EXAMPLES PRESENTED _____

1c. Directs attention to IDENTIFYING CRITICAL FEATURES in examples (using questions, statements, or other means) 2 1 0

1d. Presents NON-EXAMPLES that lack one or more critical features of concept 2 1 0

1e. Presents non-examples which, as a set, DELIMIT the concept from related abstractions with which it could be confused 2 1 0

NUMBER OF NON-EXAMPLES PRESENTED _____

1f. Directs attention to IDENTIFYING HOW CRITICAL FEATURES DISTINGUISH between examples and non-examples 2 1 0

2. PRESENTS ABSTRACTION

2a. ELICITS INITIAL DEFINITION OF CONCEPT ((name), superordinate concept, critical features) 2 1 0

2b. As appropriate, presents ADDITIONAL EXAMPLES/NONEXAMPLES and continues attempts to ELICIT CONCEPT DEFINITION 2 1 0

3. CLARIFIES ABSTRACTION

3a. Presents or elicits a FORMAL CONCEPT DEFINITION in written form 2 1 0

3b. Directs attention to terms describing CRITICAL FEATURES 2 1 0

4. RELATES CONCEPT TO OTHER ABSTRACTIONS

4a. COMPARES/CONTRASTS CONCEPT with related prior learning or general body of knowledge familiar to students 2 1 0

4b. Conveys SIGNIFICANCE of concept 2 1 0

CONCEPT PRACTICE - USE OF ABSTRACTION

5. Presents ADDITIONAL examples AND requires students to identify how concept CRITICAL FEATURES are portrayed OR (3 or 4) 2 1 0

6. Presents a set of EXAMPLES AND NON-EXAMPLES for students to identify AND requires students to justify responses in terms of concept CRITICAL FEATURES

7. Requires students to GENERATE THEIR OWN EXAMPLES of concept AND justify responses in terms of concept CRITICAL FEATURES 2 1 0

NUMBER OF EXAMPLES PRESENTED BY TEACHER OR STUDENTS _____

NUMBER OF NON-EXAMPLES PRESENTED BY TEACHER OR STUDENTS _____

8. ENCOURAGES STUDENTS TO VERBALIZE concept name, definition, and critical features 2 1 0

INSTRUCTIONAL MEDIA USED TO DEPICT CONCEPT EXAMPLES AND NON-EXAMPLES

Verbal description (teacher)	_____	Pictures	_____
Verbal description (other)	_____	Slides, filmstrip	_____
Printed description (case study, excerpt, illustration)	_____	Movie, videotape	_____
		Enactment, role-play	_____
Diagrams, charts, graphs	_____	Realia (actual examples)	_____

Other (list) _____ _____

GENERAL REACTIONS (Remember to write your self-evaluation essay!)
Strengths:

Two specific things you should do to improve your teaching:

pupils to see their peers successfully accomplish what they are expected to achieve. Use of the evaluation instruments before micro-teaching helps to clarify the model because it requires pupils to process relevant information when they observe a demonstration.

Reflective self-analysis is necessary to benefit from a micro-teaching experience. Sessions should be video-taped. Pupils should review their performances in private and complete a self-evaluation based on the structured feedback system. Later, the professor should meet with each pupil, review the tape, and complete an evaluation, being sure to give elaborate reasoning for each item assessed. Then the two evaluation should be compared, selected portions of the tape reviewed, and differences reconciled. It is the feedback received during this dialogue, and not merely checks on a form, that promotes pupil learning. With the knowledge and skills developed through practice and refined through reflective self-analysis coupled with structured feedback, pupils gain the competence to implement a model during student teaching. Then encouragement, perhaps coaching, and open-ended feedback help them learn to adapt models to different student needs and to classroom contingencies.

Conclusion

A models approach in a methods course is a powerful means to help pupils become effective social studies teachers. It provides a cognitive framework for understanding instruction, a basis for responding appropriately to different curriculum goals, and skills for adapting to student needs and classroom demands. The approach encompasses content traditionally taught in a methods course (e.g., curriculum, rationale, philosophy) but integrates those ideas in the process of instructional decision-making. A models approach ensures that pupils have the knowledge, the technical skills, and the values needed to make a real contribution to the education of citizens.

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